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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

: Jin MIZUGUCHI

Group Art Unit: Not Yet Assigned

Appl. No.

: 10/576,725

Examiner: Not Yet Assigned

(National Stage of PCT/JP2004/014102)

I.A. Filed

: September 27, 2004

Confirmation No.: Not Yet Assigned

For

: PROTON ACCEPTANCE TYPE SENSOR, HYDROGEN GAS

SENSOR AND ACID SENSOR

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Service Window, Mail Stop AMENDMENT
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, Applicant hereby brings to the attention of the Examiner the following information.

The following documents were cited in an International Search Report with respect to International Patent Application No. PCT/JP2004/014102, of which the present application is the U.S. National Stage Application. Copies of the International Search Report (in Japanese and English) have been filed concurrently with the present application and should thus have been brought to the attention of the Examiner.

- (1) Hiroo TAKAHASHI et al., "Dipyridyl pyrrolo prytole no Kessho Takei to Denshi Kozo," JAPAN HARDCOPY 2002 FALL MEETING Dai 90 Kai Nihon Gazo Gakkai Kenkyu Toronkai, pages 53-56, 2002.
- (2) Jin MIZUGUCHI, "Solution and Solid State Properties of 1, 4-Diketo-3, 6-bis-(4'-pyridyl)-pyrrolo-[3,4-c]-pyrrole on Protonation and Deprotonation," Ber. Bunsenges. Phys. Chem., 1993, No. 97, Vol. 5, pages 684-693.
- (3) Japanese Laid-Open Patent Publication No. 2003-240746 A, August 27,2003, together with an English language Abstract of the same.
- (4) Japanese Laid-Open Patent Publication No. 57-120847 A, July 28, 1982, together with an English language Abstract of the same.
- (5) Japanese Laid-Open Patent Publication No. 3-75551 A, March 29, 1991, together with an English language Abstract of the same.
- Japanese Laid-Open Patent Publication No. 9-249815 A, September 22,1997, together with an English language Abstract of the same.
- (7) Japanese Laid-Open Patent Publication No. 62-11159 A, January 20,1987;
- (8) U.S. Patent No. 4,717,673 to WRIGHTON et al., January 5, 1988;
- (9) U.S. Patent No. 4,721,601 to WRIGHTON et al., January 26, 1988;
- (10) U.S. Patent No. 4,895,705 to WRIGHTON et al., January 23, 1990;
- (11) U.S. Patent No. 4,929,313 to WRIGHTON, May 29, 1990;
- (12) U.S. Patent No. 5,034,192 to WRIGHTON et al., July 23, 1991; Applicant notes that documents (8) to (12) are family members of document (7).

- (13) Japanese Laid-Open Patent Publication No. 5-10908 A, January 19, 1993, together with an English language Abstract of the same;
- (14) U.S. Patent No. 5,273,841 to YAMAMOTO et al., December 28, 1993, a family member of document (13).
- (15) Japanese Laid-Open Patent Publication No. 6-160319 A, June 7, 1994, together with an English language Abstract of the same;
- (16) U.S. Patent No. 5,331,287 to YAMAGISHI et al., July 19, 1994, a family member of document (15).

The relevance of the documents cited in the International Search Report, as ascertained by the International Examiner, are set forth in the International Search Report.

Applicant further submits the following documents.

- (17) Japanese Laid-Open Patent Publication No. 59-120945 A, July 12, 1984, together with an English language Abstract of the same;
- (18) U.S. Patent No. 4,608,549 to FUKUI, August 26, 1986, a family member of document (17). Applicant notes that the Japanese document is cited on page 2 of the specification of the above-captioned application.
- (19) Japanese Laid-Open Patent Publication No. 1-250851 A, October 5, 1989, together with an English language Abstract of the same. Applicant notes that this document is cited on page 2 of the specification of the abovecaptioned application.

Further to 37 C.F.R. §1.98 (a)(2)(ii), copies of the U.S. patents cited above are not enclosed herewith. However, if any copies are needed, the Examiner is respectfully requested to contact the undersigned.

Applicant respectfully requests that the Examiner consider the above material and cite the same. Copies of the above-noted foreign documents, including the noted English language Abstracts, are attached hereto, and all of the documents are listed on an attached Form PTO-1449. The Examiner is requested to initial the appropriate spaces on the attached Form and to return a copy of the completed Form to Applicant with the next official communication in the present application.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted, Jin MIZUGUCHI

Bruce H. Bernstein

Reg. No. 29,027

Stephen M. Roylance Reg. No. 31,296

August 29, 2006 GREENBLUM & BERNSTEIN, P.L.C. 1950 Roland Clarke Place Reston, Virginia 20191 (703) 716-1191 FORM PTO-1449

Department of Commerce Patent and Trademark Office

Atty. Docket No. P29722

Application No. 10/576,725

Applicant INFORMATION DISCLOSURE STATEMENT Jin MIZUGUCHI BY APPLICANT Filing Date Group (Use several sheets if necessary) I.A. Filed September 27, 2004 Not Yet Assigned **U.S. PATENT DOCUMENTS FILING DATE EXAMINER DOCUMENT NUMBER** DATE NAME **CLASS SUBCLASS** IF APPROPRIATE INITIAL 01/05/88 7 WRIGHTON et al. 4 7 2 1 6 0 1 01/26/88 WRIGHTON et al. 01/23/90 WRIGHTON et al. 4 8 9 5 7 0 5 2 9 3 3 05/29/90 WRIGHTON 4 9 1 5 4 1 9 2 07/23/91 WRIGHTON et al. 0 3 5 2 7 3 8 4 1 12/28/93 YAMAMOTO et al. 5 2 7 07/19/94 YAMAGISHI et al. 3 3 1 8 4 6 0 8 5 4 9 08/26/86 **FUKUI FOREIGN PATENT DOCUMENTS TRANSLATION** DOCUMENT NUMBER DATE COUNTRY **CLASS SUBCLASS** 08/27/03 **JAPAN** 2003 0 7 4 6 1 2 7 07/28/82 57 0 8 4 **JAPAN** 1 03/29/91 **JAPAN** 3 0 5 5 5 9 2 4 9 1 5 09/22/97 **JAPAN** 8 01/20/87 62 0 1 1 5 9 **JAPAN** 1 5 0 1 0 9 0 8 01/19/93 **JAPAN** 1 9 06/07/94 **JAPAN** 6 1 6 0 3 59 1 2 0 9 4 5 07/12/84 **JAPAN** 1 2 5 0 5 1 10/05/89 **JAPAN** 8 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) English Language Abstract of JP 2003-240746. 2 English Language Abstract of JP 57-120847. 3 English Language Abstract of JP 3-075551. English Language Abstract of JP 9-249815. 4 5 English Language Abstract of JP 5-010908. 6 English Language Abstract of JP 6-160319. 7 English Language Abstract of JP 59-120945. 9 English Language Abstract of JP 1-250851. 9 Hiroo TAKAHASHI et al., "Dipyridyl pyrrolo prytole no Kessho Takei to Denshi Kozo," JAPAN HARDCOPY 2002 FALL MEETING Dai 90 Kai Nihon Gazo Gakkai Kenkyu Toronkai, pages 53-56, 2002. 10 Jin MIZUGUCHI, "Solution and Solid State Properties of 1, 4-Diketo-3, 6-bis-(4'-pyridyl)-pyrrolo-[3,4c]-pyrrole on Protonation and Deprotonation," Ber. Bunsenges. Phys. Chem., 1993, No. 97, Vol. 5, pages 684-693. **EXAMINER DATE CONSIDERED**

*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.